ABSTRACT

It is desirable to have selective markers suitable for screening of thermophilic bacteria such as *Thermus thermophilus*. *T. thermophilus* are good research materials for investigating the interrelation between enzyme structures and functions since they are stable at extreme pH, crystallize easily and are easy-to-handle. Novel mutants of *Staphylococcus aureus* kanamycin nucleotidyltransferase with markedly improved thermostability are disclosed, as well as a selective marker using the same, and a screening method for thermophilic bacteria such as *T. thermophilus* using said selective marker.

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